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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,353	08/15/2001	Wen-Tsung Liu	LIUW3001/EM/7128	8865

23364 7590 08/05/2004  
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EXAMINER

VU, THONG H

ART UNIT PAPER NUMBER

2142

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/929,353

Applicant(s)

LIU ET AL.

Examiner

Thong H Vu

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-5 are pending.
2. Claim 1 has been amended to overcome the prior art. Therefore the Final Action is appropriate.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are rejected under the judicially created doctrine of double patenting over claims 1-9 of U. S. Patent No. 6,567,273 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

(‘273, claim 1) A silicon disk card with a USB plug comprising:  
an electric circuit board faith at least one flash memory and a bridging chip;  
a module including a rectangular plastic frame, said module being provided on one side thereof with an interface pin board electrically connected to said circuit board, and on the opposite side thereof with a slot to receive said USB plug therein, said USB plug also being electrically connected to said circuit board, wherein said silicon disk card forms a twin interface data transmission means for enabling access to said flash memory by both a USB interface and said interface pin board, said bridging chip provides a means for discriminating which interface is accessing said data, and said slot forms a means for guiding said USB plug out of said module when in use in order to connect said plug to an external USB device.

(Application, claim 1) A double interfaced storage communication network card with a communication protocol device, a first interface and a first signal transmission end disposed at the front end thereof for insertion into an interface insert slot of a first computing device so as to support the-an application demand from the first computing device and a receiving space disposed inside the network card for accommodating a circuit board or other electronic components arranged to support and instructional action of the first transmission end in response to action signals received from said first computing device, a micro control chip and a memory body, comprising:

a communication protocol device disposed at respective end of the first interface; wherein the said-communication protocol device further has a second interface and a second signal transmission end for connecting with a CPU of a second computer device;

wherein the micro control chip automatically detects, judges and supports the action signals from either of the first computing device and the second computing device through the first and the second interfaces; and

wherein when any of the signal transmission ends of the or the second interface provides action signals, the micro control chip orders the circuit board or other electronic components to support the-an instructional action of the first or the second signal transmission end in response to said action signals from either of the first computing device and the second computing device through either of the first and the second interfaces.

(claim 3) wherein the communication device includes at least USB and 1394 devices.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2,4,5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Ohara [6,694,376 B1].

4. As per claim 1, Ohara discloses a double interfaced storage communication network card with a communication protocol device, a first interface and a first signal transmission end disposed at the front end thereof for insertion into an interface insert slot of a first computing device so as to support the-an application demand from the first computing device and a receiving space disposed inside the network card for accommodating a circuit board or other electronic components arranged to support and instructional action of the first transmission end in response to action signals received from said first computing device, a micro control chip and a memory body, comprising:

a communication protocol device disposed at respective end of the first interface [Ohara, TFTP, LRP and UDP, col 5 line 64-col 6 line 10];

wherein the said-communication protocol device further has a second interface and a second signal transmission end for connecting with a CPU of a second computer device [Ohara, CPU 50, CPU 5, CPU 6 and CPU 11, Fig 1];

wherein the micro control chip automatically detects, judges and supports the action signals from either of the first computing device and the second computing device through the first and the second interfaces [Ohara Fig 1]; and

wherein when any of the signal transmission ends of the or the second interface provides action signals, the micro control chip orders the circuit board or other electronic components to support the-an instructional action of the first or the second signal transmission end in response to said action signals from either of the first computing device and the second computing device through either of the first and the second interfaces [Ohara, by detecting this instruction data, the CPU 11 can determine that firmware was received.

5. As per claim 2, Ohara discloses the storage communication device includes at least a peripheral product corresponding with the regulation of a PC card and a CF card as inherent feature of NIC.

6. As per claim 4, Ohara discloses the second signal transmission end connects to a signal transmission cable for connecting with the CPU of the second computing device [Ohara, CPU 50, CPU 5, CPU 6 and CPU 11, Fig 1].

7. As per claim 5, Ohara discloses the peripheral products corresponding with the regulations of the PC card and the CF card include at least the memory card, a digital card, various types of converter cards for the memory cards, cabled and the wireless network cards and a bluetooth wireless communication card as inherent feature of NIC.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Ohara [6,694,376 B1] in view of Chang [6,560,099 B1].

8. As per claim 3, Ohara discloses the NIC includes a transceiver and LAN controller and a bus 8, Fig 1, col 5 lines 30-50]. However Ohara does not detail the communication device includes at least USB and 1394 devices.

It was well-known in the network interface art that a controller may provide a double interface [see Elliott, col 3 lines 15-35] or using a USB/IEEE1394 for double interface to enhance the communication between devices [Chang, col 1 lines 35-47; col 6 lines 10-42].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the double interface with USB/IEEE 1394 interface as taught by Chang into the Ohara's apparatus in order to utilize the NIC.



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Doing so would provide a dynamic processing the network signals between network devices.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,2,4,5 are rejected under 35 U.S.C. § 102(e) as being anticipated by Bemanian et al [Bemanian 5,857,087].

9. As per claim 1, Bemanian discloses a double interfaced storage communication network card with a communication protocol device, a first interface and a first signal transmission end disposed at the front end thereof for insertion into an interface insert slot of a first computing device so as to support the-an application demand from the first computing device and a receiving space disposed inside the network card for accommodating a circuit board or other electronic components arranged to support and instructional action of the first transmission end in response to action signals received from said first computing device, a micro control chip and a memory body, comprising:  
a communication protocol device disposed at respective end of the first interface  
[Bemanian, two network interface modules, col 5 lines 5-20];

wherein the said communication protocol device further has a second interface and a second signal transmission end for connecting with a CPU of a second computer device [Bermanian, different protocols, different types of networks, col 4 lines 32-43];

wherein the micro control chip automatically detects, judges and supports the action signals from either of the first computing device and the second computing device through the first and the second interfaces; and wherein when any of the signal transmission ends of the or the second interface provides action signals, the micro control chip orders the circuit board or other electronic components to support the-an instructional action of the first or the second signal transmission end in response to said action signals from either of the first computing device and the second computing device through either of the first and the second interfaces [Bermanian, on-chip DMA controller, col 12 lines 23-38, col 20 lines 23-38. It was obvious the chip contains the code which automatically detects the signals].

10. As per claim 2, Bermanian discloses the storage communication device includes at least a peripheral product corresponding with the regulation of a PC card and a CF card as inherent feature of NIC.

11. As per claim 4, Bermanian discloses the second signal transmission end connects to a signal transmission cable for connecting with the CPU of the second computing device [Bermanian, different protocols, different types of networks, col 4 lines 32-43].

12. As per claim 5, Bemanian discloses the peripheral products corresponding with the regulations of the PC card and the CF card include at least the memory card, a digital card, various types of converter cards for the memory cards, cabled and the wireless network cards and a bluetooth wireless communication card as inherent feature of NIC.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Bemanian et al [Bemanian 5,857,087] in view of Chang [6,560,099 B1].

13. As per claim 3, Bemanian discloses a CPU module 36, an interface module 38 and two network interface modules, Fig 3-4, col 4 lines 60-65]. However Ohara does not detail the communication device includes at least USB and 1394 devices.

It was well-known in the network interface art that a controller may provide a double interface [see Elliott, col 3 lines 15-35] or using a USB/IEEE1394 for double interface to enhance the communication between devices [Chang, col 1 lines 35-47; col 6 lines 10-42].

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the double interface with USB/IEEE 1394 interface as taught by Chang into the Bemanian's apparatus in order to utilize the

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network interface modules. Doing so would provide a dynamic processing the network signals between network devices.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (703)-305-4643.

The examiner can normally be reached on Monday-Thursday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (703) 305-9705.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9700.

Any response to this action should be mailed to: Commissioner of Patent and Trademarks, Washington, D.C. 20231 or faxed to :

After Final (703) 746-7238

Official: (703) 746-7239

Non-Official (703) 746-7240

Hand-delivered responses should be brought to Crystal Park 11,2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

*Thong Vu*  
*Patent Examiner*  
*Art Unit 2142*

